

This mock proposal is just an example for euproposal.cls  
it reflects the ICT template of January 2012

Small or Medium-Scale Focused Research Project (STREP)

**ICT Call 1**

FP7-???-200?-?

**iPoWr: Intelligent Prosal Writing**

Acronym: iPoWr

site=jacu  
site=efo  
site=bar  
site=baz  
acro=iPoW  
inst=Small  
Scale Fo  
Project (S

**Date of Preparation: June 12, 2016**

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| # | Participant organisation name | Short name | Country |
|---|-------------------------------|------------|---------|
| 1 | Jacobs University Bremen      | JACU       | D       |
| 2 | European Future Office        | EFO        | NL      |
| 3 | Université de BAR             | BAR        | F       |
| 4 | BAZ International Ltd         | BAZ        | UK      |

## Abstract

Writing grant proposals is a collaborative effort that requires the integration of contributions from many individuals. The use of an ASCII-based format like  $\text{\LaTeX}$  allows to coordinate the process via a source code control system like SUBVERSION, allowing the proposal writing team to concentrate on the contents rather than the mechanics of wrangling with text fragments and revisions.

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|           | <i>Recommended length for the whole part B: 50–60 pages (including tables, references, etc.)</i> |           | Done:1 |

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<sup>1</sup>To Do: from the proposal template

Scientific and Technical Quality *Maximum length for the whole of Section 1 — twenty pages, not including the tables in Section 1.3*

## 1 Concept and Objectives

*Explain the concept of your project. What are the main ideas that led you to propose this work? Describe in detail the S&T objectives. Show how they relate to the topics addressed by the call. The objectives should be those achievable within the project, not through subsequent development. They should be stated in a measurable and verifiable form, including through the milestones that will be indicated under Section 1.3 below.*

## 2 Progress beyond the State-of-the-Art

*Describe the state-of-the-art in the area concerned, and the advance that the proposed project would bring about. If applicable, refer to the results of any patent search you might have carried out.*

## 3 Scientific/Technical Methodology and Work Plan

*A detailed work plan should be presented, broken down into work packages<sup>1</sup> (WPs) which should follow the logical phases of the implementation of the project, and include consortium management and assessment of progress and results. (Note that your overall approach to management will be described later, in Section 2).*

*Notes: The number of work packages used must be appropriate to the complexity of the work and the overall value of the proposed project. The planning should be sufficiently detailed to justify the proposed effort and allow progress monitoring by the Commission.*

*Any significant risks should be identified, and contingency plans described*

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<sup>2</sup>To Do: *from the proposal template*

<sup>3</sup>To Do: *from the proposal template*

<sup>4</sup>To Do: *from the proposal template*

<sup>5</sup>To Do: *from the proposal template*

<sup>1</sup>A work package is a major sub-division of the proposed project with a verifiable end-point – normally a deliverable or an important milestone in the overall project.

Figure 3.0.1: Work package dependencies

- 1. Describe the overall strategy of the work plan<sup>7</sup>
- 2. Show the timing of the different WPs and their components (Gantt chart or similar).

ToDo:6  
EdN:7

Done:6

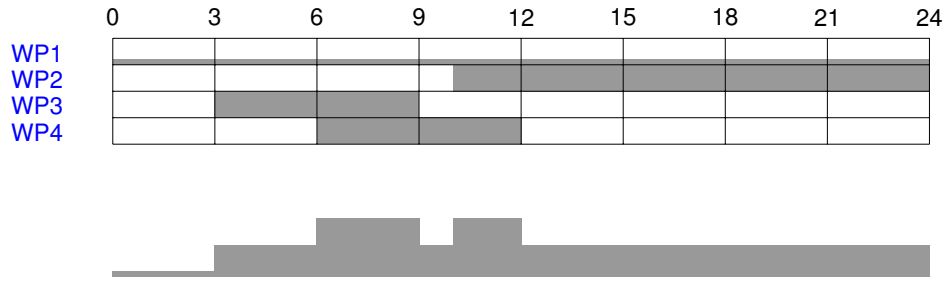


Figure 3.0.2: Gantt Chart: Overview Work Package Activities (lower bar shows the overall effort per month)

<sup>6</sup>To Do: from the proposal template

<sup>7</sup>EDNOTE: Maximum length – one page

<sup>1</sup>Bars shown at reduced height (e.g. 50%) indicate reduced intensity during that work phase (e.g. to 50%).

### 3.1 Work Package List

Please indicate one activity per work package: RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium

| WP            | Title         | type | page | start | end | JACU      | EFO       | BAR       | BAZ       | total     |
|---------------|---------------|------|------|-------|-----|-----------|-----------|-----------|-----------|-----------|
| WP1           | Management    | MGT  | 6    | 0     | 24  | 2         | 2         | 2         | 2         | <b>8</b>  |
| WP2           | Dissemination | RTD  | 8    | 10    | 24  | 2         | <i>8</i>  | 2         | 2         | <b>14</b> |
| WP3           | Class         | RTD  | 9    | 3     | 9   | 12        |           | 12        |           | <b>24</b> |
| WP4           | Template      | DEM  | 10   | 6     | 12  |           |           | 6         | 6         | <b>12</b> |
| <b>totals</b> |               |      |      |       |     | <b>16</b> | <b>10</b> | <b>22</b> | <b>10</b> | <b>58</b> |

Efforts in PM; WP lead efforts light gray italicised

Table 3.1.1: Work Packages

<sup>8</sup>To Do: from the proposal template

### 3.2 List of Deliverables

1. Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.
2. Please indicate the nature of the deliverable using one of the following codes: R = Report, P = Prototype, D = Demonstrator, O = Other
3. Please indicate the dissemination level using one of the following codes: PU = Public PP = Restricted to other programme participants (including the Commission Services). RE = Restricted to a group specified by the consortium (including the Commission Services). CO = Confidential, only for members of the consortium (including the Commission Services).

We will now give an overview over the deliverables and milestones of the work packages. Note that the times of deliverables after month 24 are estimates and may change as the work packages progress.

In the table below, *integrating work deliverables* (see top of section 3.1) are printed in boldface to mark them. They integrate contributions from multiple work packages.<sup>10</sup> These can have the dissemination level “partial”, which indicates that it contains parts of level “project” that are to be disseminated to the project and evaluators only. In such reports, two versions are prepared, and disseminated accordingly.

| #           | Deliverable name   | WP  | Lead | Type | Level  | Due |
|-------------|--|-----|------|------|--------|-----|
| <b>D1.1</b> | Project-internal mailing lists                                 | WP1 | ??   | O    | PP     | 1   |
| <b>D2.1</b> | Set-up of the Project web server                               | WP2 | ??   | O    | PU     | 2   |
| <b>D1.2</b> | Project management handbook                                    | WP1 | ??   | R    | PU     | 3   |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 6   |
| <b>D1.4</b> | iPoWr Helpdesk   | WP1 | ??   | O    | PU     | 6   |
| <b>D3.1</b> | Requirements analysis  | WP3 | ??   | R    | PP     | 6   |
| <b>D4.1</b> | Requirements analysis  | WP4 | ??   | R    | PP     | 6   |
| <b>D2.2</b> | Proceedings of the first iPoWr Summer School.                  | WP2 | ??   | R    | PU     | 8   |
| <b>D2.3</b> | Dissemination Plan   | WP2 | ??   | R    | PP     | 9   |
| <b>D2.4</b> | Scientific and Commercial Exploitation Plan                    | WP2 | ??   | R    | PP     | 9   |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 12  |
| <b>D3.2</b> | iPoWr Specification  | WP3 | ??   | R    | PU     | 12  |
| <b>D4.2</b> | iPoWr Specification  | WP4 | ??   | R    | PU     | 12  |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 18  |
| <b>D3.3</b> | First demonstrator (article.cls really)                        | WP3 | ??   | P    | PU     | 18  |
| <b>D4.3</b> | First demonstrator (article.cls really)                        | WP4 | ??   | D    | PU     | 18  |
| <b>D2.5</b> | Proceedings of the second iPoWr Summer School.                 | WP2 | ??   | R    | PU     | 20  |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 24  |
| <b>D3.4</b> | First prototype  | WP3 | ??   | P    | PU     | 24  |
| <b>D4.4</b> | First prototype  | WP4 | ??   | P    | PU     | 24  |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 30  |
| <b>D2.6</b> | Proceedings of the third iPoWr Summer School.                  | WP2 | ??   | R    | PU     | 32  |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 36  |
| <b>D1.5</b> | Final plan for using and disseminating the knowledge           | WP1 | ??   | R    | PU     | 36  |
| <b>D3.5</b> | Final L <sup>A</sup> T <sub>E</sub> X class, ready for release | WP3 | ??   | P    | PU     | 36  |
| <b>D4.5</b> | Final Template, ready for release                              | WP4 | ??   | P    | PU     | 36  |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 42  |
| <b>D2.7</b> | Proceedings of the fourth iPoWr Summer School.                 | WP2 | ??   | R    | PU     | 44  |
| <b>D1.3</b> | Periodic activity report                                       | WP1 | ??   | R    | public | 48  |
| <b>D1.6</b> | Final management report  | WP1 | ??   | R    | PU     | 48  |

ToDo:9

Done:9

EdN:10

<sup>9</sup>To Do: from the proposal template

<sup>10</sup>EdNOTE: CL: the rest of this paragraph does not comply with the EU guide for applicants, needs to be rewritten

### 3.3 List of Milestones

Milestones are control points where decisions are needed with regard to the next stage of the project. For example, a milestone may occur when a major result has been achieved, if its successful attainment is a requirement for the next phase of work. Another example would be a point when the consortium must decide which of several technologies to adopt for further development.

Means of verification: Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate. For examples: a laboratory prototype completed and running flawlessly, software released and validated by a user group, field survey complete and data quality validated.

The work in the iPoWr project is structured by seven milestones, which coincide with the project meetings in summer and fall. Since the meetings are the main face-to-face interaction points in the project, it is suitable to schedule the milestones for these events, where they can be discussed in detail. We envision that this setup will give the project the vital coherence in spite of the broad mix of disciplinary backgrounds of the participants.<sup>12</sup>

1. **MilestoneM1 (Month1) Initial Infrastructure** Set up the organizational infrastructure, in particular: Web Presence, project TRAC,...
2. **MilestoneM2 (Month24) Consensus** Reach Consensus on the way the project goes
3. **MilestoneM3 (Month36) Exploitation** The exploitation plan should be clear so that we can start on this in the last year.
4. **MilestoneM4 (Month48) Final Results** all is done

### 3.4 Work Package Descriptions

| Work Package 1: Project Management |      |     |     |     | Start: 0 |
|------------------------------------|------|-----|-----|-----|----------|
| Site                               | JACU | EFO | BAR | BAZ | all      |
| Effort                             | 2    | 2   | 2   | 2   | 8        |

We can state the state of the art and similar things before the summary in the boxes here.

| Work Package 1: Project Management |      |     |     |     | Start: 0 |
|------------------------------------|------|-----|-----|-----|----------|
| Site                               | JACU | EFO | BAR | BAZ | all      |
| Effort                             | 2    | 2   | 2   | 2   | 8        |

#### Objectives

- To perform the administrative, scientific/technical, and financial management of the project
- To co-ordinate the contacts with the EU
- To control quality and timing of project results and to resolve conflicts
- To set up inter-project communication rules and mechanisms

#### Description

Based on the Consortium Agreement, i.e. the contract with the European Commission, and based on the financial and administrative data agreed, the project manager will carry out the overall project management, including administrative management. A project quality handbook will be defined, and a iPoWr help-desk for answering questions about the format (first project-internal, and after month 12 public) will be established. The project management will... we can even reference deliverables: [D1.3](#) and even the variant with a title: [D1.3: Periodic activity report](#)

#### Deliverables:

- D1.1 (Due: 1, Type: O, Dissem.: PP, Lead: ??)** *Project-internal mailing lists* ~M1
- D1.2 (Due: 3, Type: R, Dissem.: PU, Lead: ??)** *Project management handbook* ~M2
- D1.3 (Due: 6,12,18,24,30,36,42,48, Type: R, Dissem.: public, Lead: ??)** *Periodic activity report* ~M2,M4  
Partly compiled from activity reports of the work package coordinators; to be approved by the work package coordinators before delivery to the Commission. Financial reporting is mainly done in months 18 and 36.<sup>13</sup>
- D1.4 (Due: 6, Type: O, Dissem.: PU, Lead: ??)** *iPoWr Helpdesk* ~M1
- D1.5 (Due: 36, Type: R, Dissem.: PU, Lead: ??)** *Final plan for using and disseminating the knowledge* ~M4
- D1.6 (Due: 48, Type: R, Dissem.: PU, Lead: ??)** *Final management report* ~M4

<sup>11</sup>To Do: from the proposal template

<sup>12</sup>EdNOTE: maybe automate the milestones

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<sup>xiii</sup> EdNOTE: *how about these numbers?*



|   |      |     |     |     |                  |
|---|------|-----|-----|-----|------------------|
| <b>Work Package 2: Dissemination and Exploitation</b> |      |     |     |     | <b>Start: 10</b> |
| Site  | JACU | EFO | BAR | BAZ | all              |
| Effort  | 2    | 8   | 2   | 2   | 14               |

We can state the state of the art and similar things before the summary in the boxes here.

|   |      |     |     |     |                  |
|---|------|-----|-----|-----|------------------|
| <b>Work Package 2: Dissemination and Exploitation</b> |      |     |     |     | <b>Start: 10</b> |
| Site  | JACU | EFO | BAR | BAZ | all              |
| Effort  | 2    | 8   | 2   | 2   | 14               |

### Objectives

Much of the activity of a project involves small groups of nodes in joint work. This work package is set up to ensure their best wide-scale integration, communication, and synergetic presentation of the results. Clearly identified means of dissemination of work-in-progress as well as final results will serve the effectiveness of work within the project and steadily improve the visibility and usage of the emerging semantic services.

### Description

The work package members set up events for dissemination of the research and work-in-progress results for researchers (workshops and summer schools), and for industry (trade fairs). An in-depth evaluation will be undertaken of the response of test-users.

Within two months of the start of the project, a project website will go live. This website will have two areas: a members' area and a public area...

### Deliverables:

- D2.1 (Due: 2, Type: O, Dissem.: PU, Lead: ??)** *Set-up of the Project web server* ~M1
- D2.2 (Due: 8, Type: R, Dissem.: PU, Lead: ??)** *Proceedings of the first iPoWr Summer School.* ~M1
- D2.3 (Due: 9, Type: R, Dissem.: PP, Lead: ??)** *Dissemination Plan*
- D2.4 (Due: 9, Type: R, Dissem.: PP, Lead: ??)** *Scientific and Commercial Exploitation Plan* ~M3
- D2.5 (Due: 20, Type: R, Dissem.: PU, Lead: ??)** *Proceedings of the second iPoWr Summer School.* ~M3
- D2.6 (Due: 32, Type: R, Dissem.: PU, Lead: ??)** *Proceedings of the third iPoWr Summer School.* ~M3
- D2.7 (Due: 44, Type: R, Dissem.: PU, Lead: ??)** *Proceedings of the fourth iPoWr Summer School.* ~M3

|   |                      |                     |                 |
|---|----------------------|---------------------|-----------------|
| <b>Work Package 3: A <math>\LaTeX</math> class for EU Proposals</b> |                      |                     | <b>Start: 3</b> |
| Site  | <a href="#">JACU</a> | <a href="#">BAR</a> | <b>all</b>      |
| Effort  | 12                   | 12                  | <b>24</b>       |

We can state the state of the art and similar things before the summary in the boxes here.

|   |                      |                     |                 |
|---|----------------------|---------------------|-----------------|
| <b>Work Package 3: A <math>\LaTeX</math> class for EU Proposals</b> |                      |                     | <b>Start: 3</b> |
| Site  | <a href="#">JACU</a> | <a href="#">BAR</a> | <b>all</b>      |
| Effort  | 12                   | 12                  | <b>24</b>       |

### Objectives

$\LaTeX$  is the best document markup language, it can even be used for literate programming [[Knu92](#); [Lam94](#); [Knu84](#)]  
 To develop a  $\LaTeX$  class for marking up EU Proposals

### Description

We will follow strict software design principles, first comes a requirements analysis, then . . .

### Deliverables:

- D3.1 (Due: 6, Type: R, Dissem.: PP, Lead: ??)** *Requirements analysis* ~M1
- D3.2 (Due: 12, Type: R, Dissem.: PU, Lead: ??)** *iPoWr Specification* ~M2
- D3.3 (Due: 18, Type: P, Dissem.: PU, Lead: ??)** *First demonstrator (article.cls really)* ~M2,M4
- D3.4 (Due: 24, Type: P, Dissem.: PU, Lead: ??)** *First prototype* ~M4
- D3.5 (Due: 36, Type: P, Dissem.: PU, Lead: ??)** *Final  $\LaTeX$  class, ready for release* ~M4

Furthermore, this work package contributes to [D1.3](#) and [D1.6](#).

|  |                     |                     |                 |
|--|---------------------|---------------------|-----------------|
| <b>Work Package 4: iPoWr Proposal Template</b> |                     |                     | <b>Start: 6</b> |
| Site   | <a href="#">BAR</a> | <a href="#">BAZ</a> | <b>all</b>      |
| Effort   | 6                   | 6                   | <b>12</b>       |

We can state the state of the art and similar things before the summary in the boxes here.

|  |                     |                     |                 |
|--|---------------------|---------------------|-----------------|
| <b>Work Package 4: iPoWr Proposal Template</b> |                     |                     | <b>Start: 6</b> |
| Site   | <a href="#">BAR</a> | <a href="#">BAZ</a> | <b>all</b>      |
| Effort   | 6                   | 6                   | <b>12</b>       |

### Objectives

To develop a template file for iPoWr proposals

### Description

We abstract an example from existing proposals

### Deliverables:

|  |        |
|--|--------|
| <b>D4.1 (Due: 6, Type: R, Dissem.: PP, Lead: ??)</b> <i>Requirements analysis</i>                    | ~M1    |
| <b>D4.2 (Due: 12, Type: R, Dissem.: PU, Lead: ??)</b> <i>iPoWr Specification</i>                     | ~M2    |
| <b>D4.3 (Due: 18, Type: D, Dissem.: PU, Lead: ??)</b> <i>First demonstrator (article.cls really)</i> | ~M2,M4 |
| <b>D4.4 (Due: 24, Type: P, Dissem.: PU, Lead: ??)</b> <i>First prototype</i>                         | ~M4    |
| <b>D4.5 (Due: 36, Type: P, Dissem.: PU, Lead: ??)</b> <i>Final Template, ready for release</i>       | ~M4    |

Furthermore, this work package contributes to [D1.3](#) and [D1.6](#).

### 3.5 Significant Risks and Associated Contingency Plans

*Describe any significant risks, and associated contingency plans*

ToDo:14  
Done:14  
BOP:15

**Global Risk Management** The crucial problem of iPoWr (and similar endeavors that offer a new basis for communication and interaction) is that of community uptake: Unless we can convince scientists and knowledge workers industry to use the new tools and interactions, we will never be able to assemble the large repositories of flexiformal mathematical knowledge we envision. We will consider uptake to be the main ongoing evaluation criterion for the network.

EOP:15

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<sup>14</sup>To DO: *from the proposal template*

<sup>15</sup>OLD PART: *need to integrate this somewhere. CL: I will check other proposals to see how they did it; the Guide does not really prescribe anything.*

Implementation

## 4 Management Structure and Procedures

Describe the organizational structure and decision-making mechanisms of the project. Show how they are matched to the nature, complexity and scale of the project. Maximum length of this section: five pages.

The Project Management of iPoWr is based on its Consortium Agreement, which will be signed before the Contract is signed by the Commission. The Consortium Agreement will enter into force as from the date the contract with the European Commission is signed.

### 4.1 Organizational structure

### 4.2 Milestones

| #         | Name                          | WPs <sup>2</sup> /Deliverables involved      | Mo | Means of Verif. |
|-----------|-------------------------------|--|----|-----------------|
| <b>M1</b> | <i>Initial Infrastructure</i> | D1.1 D1.4 D2.1 D2.2 D3.1 D4.1                | 1  | Inspection      |
| <b>M2</b> | <i>Consensus</i>              | D1.2 D1.3 D3.2 D3.3 D4.2 D4.3                | 24 | Inspection      |
| <b>M3</b> | <i>Exploitation</i>           | D2.4 D2.5 D2.6 D2.7                          | 36 | Inspection      |
| <b>M4</b> | <i>Final Results</i>          | D1.3 D1.5 D1.6 D3.3 D3.4 D3.5 D4.3 D4.4 D4.5 | 48 | Inspection      |

Table 4.2.1: Milestones, Deliverables, and Verification

### 4.3 Risk Assessment and Management

### 4.4 Information Flow and Outreach

### 4.5 Quality Procedures

### 4.6 Internal Evaluation Procedures

<sup>16</sup>To Do: from the proposal template

<sup>2</sup>The work package number is the first number in the deliverable number.

## 5 Individual Participants

*For each participant in the proposed project, provide a brief description of the legal entity, the main tasks they have been attributed, and the previous experience relevant to those tasks. Provide also a short profile of the individuals who will be undertaking the work.*

*Maximum length for Section 2.2: one page per participant. However, where two or more departments within an organisation have quite distinct roles within the proposal, one page per department is acceptable.*

*The maximum length applying to a legal entity composed of several members, each of which is a separate legal entity (for example an EEIG<sup>17</sup>), is one page per member, provided that the members have quite distinct roles within the proposal.*

ToDo:17

Done:17

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<sup>17</sup>To Do: from the proposal template

### 5.0.1 JACU: JACOBS UNIVERSITY BREMEN (D)

**Organization** Jacobs University Bremen is a private research university patterned after the Anglo-Saxon university system. The university opened in 2001 and has an international student body (1,245 students from 102 nations as of 2011, admitted in a highly selective process).

The KWARC (KnoWledge Adaptation and Reasoning for Content<sup>3</sup>) Group headed by *Prof. Dr. Michael Kohlhase* specializes in building knowledge management systems for e-science applications, in particular for the natural and mathematical sciences. Formal logic, natural language semantics, and semantic web technology provide the foundations for the research of the group.

Since doing research and developing systems is much more fun than writing proposals, they try to do that as efficiently as possible, hence this meta-proposal.

#### Main tasks

- creating  $\LaTeX$  class files

**Relevant previous experience** The KWARC group is the main center and lead implementor of the OMDoc (Open Mathematical Document) format for representing mathematical knowledge. The group has developed added-value services powered by such semantically rich representations, different paths to obtaining them, as well as platforms that integrate both aspects. Services include the adaptive context-sensitive presentation framework JOMDoc and the semantic search engine MathWebSearch. For obtaining rich mathematical content, the group has been pursuing the two alternatives of assisting manual editing (with the sTeXIDE editing environment) and automatic annotation using natural language processing techniques. The latter is work in progress but builds on the arXMLiv system, which is currently capable of converting 70% out of the 600,000 scientific publications in the arXiv from  $\LaTeX$  to XHTML+MathML without errors. Finally, the KWARC group has been developing the Planetary integrated environment.

#### Specific expertise

- writing intelligent proposals

**Staff members involved** **Prof. Dr. Michael Kohlhase** is head of the KWARC research group. He is the head developer of the OMDoc mathematical markup language. He was a member of the Math Working Group at W3C, which finished its work with the publication of the MathML 3 recommendation. He is president of the OpenMath society and trustee of the MKM interest group.

#### Key publications relevant to the project

- [Aus+10] R. Ausbrooks et al. *Mathematical Markup Language (MathML) Version 3.0*. W3C Recommendation. World Wide Web Consortium (W3C), 2010. URL: <http://www.w3.org/TR/MathML3>.
- [Koh+11] M. Kohlhase et al. "The Planetary System: Web 3.0 & Active Documents for STEM". In: accepted for publication at ICCS 2011 (Finalist at the Executable Papers Challenge). 2011. URL: <https://svn.mathweb.org/repos/planetary/doc/epc11/paper.pdf>.
- [Koh06] M. Kohlhase. *OMDoc – An open markup format for mathematical documents [Version 1.2]*. LNAI 4180. Springer Verlag, Aug. 2006. URL: <http://omdoc.org/pubs/omdoc1.2.pdf>.
- [Koh10] M. Kohlhase. *Preparing DFG Proposals in  $\LaTeX$  with *dfgproposal.cls**. Self-documenting  $\LaTeX$  package. KWARC Group, Jacobs University Bremen, 2010. URL: <https://svn.kwarc.info/repos/kwarc/doc/macros/forCTAN/dfgproposal.pdf>.
- [Pro] ...
- [Sta+10] H. Stamerjohanns, M. Kohlhase, D. Ginev, C. David, and B. Miller. "Transforming large collections of scientific publications to XML". In: *Mathematics in Computer Science 3.3 (2010): Special Issue on Authoring, Digitalization and Management of Mathematical Knowledge*. Ed. by S. Autexier, P. Sojka, and M. Suzuki, pp. 299–307. URL: <http://kwarc.info/kohlhase/papers/mcs10.pdf>.

<sup>3</sup><http://kwarc.info>

## 5.0.2 EFO: EUROPEAN FUTURE OFFICE (NL)

**Organization** The EFO is the world leader in futurology, ...

### Main tasks

### Relevant previous experience

### Specific expertise

### Staff members undertaking the work

### Key publications relevant to the project

- [Aus+10] R. Ausbrooks et al. *Mathematical Markup Language (MathML) Version 3.0*. W3C Recommendation. World Wide Web Consortium (W3C), 2010. URL: <http://www.w3.org/TR/MathML3>.
- [Koh+11] M. Kohlhase et al. "The Planetary System: Web 3.0 & Active Documents for STEM". In: accepted for publication at ICCS 2011 (Finalist at the Executable Papers Challenge). 2011. URL: <https://svn.mathweb.org/repos/planetary/doc/epc11/paper.pdf>.
- [Koh06] M. Kohlhase. *OMDOC – An open markup format for mathematical documents [Version 1.2]*. LNAI 4180. Springer Verlag, Aug. 2006. URL: <http://omdoc.org/pubs/omdoc1.2.pdf>.
- [Koh10] M. Kohlhase. *Preparing DFG Proposals in L<sup>A</sup>T<sub>E</sub>X with dfgproposal.cls*. Self-documenting L<sup>A</sup>T<sub>E</sub>X package. KWARC Group, Jacobs University Bremen, 2010. URL: <https://svn.kwarc.info/repos/kwarc/doc/macros/forCTAN/dfgproposal.pdf>.
- [Pro] ...
- [Sta+10] H. Stamerjohanns, M. Kohlhase, D. Ginev, C. David, and B. Miller. "Transforming large collections of scientific publications to XML". In: *Mathematics in Computer Science 3.3 (2010): Special Issue on Authoring, Digitalization and Management of Mathematical Knowledge*. Ed. by S. Autexier, P. Sojka, and M. Suzuki, pp. 299–307. URL: <http://kwarc.info/kohlhase/papers/mcs10.pdf>.



### 5.0.3 BAR: UNIVERSITÉ DE BAR (F)

**Organization** Université de BAR specializes on drinking lots of red wine. It is a partner in the consortium, because it has a very nice chateau on the Cote d'Azure, where it can host gorgeous project meetings.

#### Main tasks

#### Relevant previous experience

#### Specific expertise

#### Staff members undertaking the work

#### Key publications relevant to the project

- [Aus+10] R. Ausbrooks et al. *Mathematical Markup Language (MathML) Version 3.0*. W3C Recommendation. World Wide Web Consortium (W3C), 2010. URL: <http://www.w3.org/TR/MathML3>.
- [Koh+11] M. Kohlhase et al. "The Planetary System: Web 3.0 & Active Documents for STEM". In: accepted for publication at ICCS 2011 (Finalist at the Executable Papers Challenge). 2011. URL: <https://svn.mathweb.org/repos/planetary/doc/epc11/paper.pdf>.
- [Koh06] M. Kohlhase. *OMDOC – An open markup format for mathematical documents [Version 1.2]*. LNAI 4180. Springer Verlag, Aug. 2006. URL: <http://omdoc.org/pubs/omdoc1.2.pdf>.
- [Koh10] M. Kohlhase. *Preparing DFG Proposals in L<sup>A</sup>T<sub>E</sub>X with dfgproposal.cls*. Self-documenting L<sup>A</sup>T<sub>E</sub>X package. KWARC Group, Jacobs University Bremen, 2010. URL: <https://svn.kwarc.info/repos/kwarc/doc/macros/forCTAN/dfgproposal.pdf>.
- [Pro] ...
- [Sta+10] H. Stamerjohanns, M. Kohlhase, D. Ginev, C. David, and B. Miller. "Transforming large collections of scientific publications to XML". In: *Mathematics in Computer Science 3.3 (2010): Special Issue on Authoring, Digitalization and Management of Mathematical Knowledge*. Ed. by S. Autexier, P. Sojka, and M. Suzuki, pp. 299–307. URL: <http://kwarc.info/kohlhase/papers/mcs10.pdf>.

## 5.0.4 BAZ: BAZ INTERNATIONAL LTD (UK)

### Organization

### Main tasks

### Relevant previous experience

### Specific expertise

### Staff members undertaking the work

### Key publications relevant to the project

- [Aus+10] R. Ausbrooks et al. *Mathematical Markup Language (MathML) Version 3.0*. W3C Recommendation. World Wide Web Consortium (W3C), 2010. URL: <http://www.w3.org/TR/MathML3>.
- [Koh+11] M. Kohlhase et al. "The Planetary System: Web 3.0 & Active Documents for STEM". In: accepted for publication at ICCS 2011 (Finalist at the Executable Papers Challenge). 2011. URL: <https://svn.mathweb.org/repos/planetary/doc/epc11/paper.pdf>.
- [Koh06] M. Kohlhase. *OMDOC – An open markup format for mathematical documents [Version 1.2]*. LNAI 4180. Springer Verlag, Aug. 2006. URL: <http://omdoc.org/pubs/omdoc1.2.pdf>.
- [Koh10] M. Kohlhase. *Preparing DFG Proposals in L<sup>A</sup>T<sub>E</sub>X with dfgproposal.cls*. Self-documenting L<sup>A</sup>T<sub>E</sub>X package. KWARC Group, Jacobs University Bremen, 2010. URL: <https://svn.kwarc.info/repos/kwarc/doc/macros/forCTAN/dfgproposal.pdf>.
- [Pro] ...
- [Sta+10] H. Stamerjohanns, M. Kohlhase, D. Ginev, C. David, and B. Miller. "Transforming large collections of scientific publications to XML". In: *Mathematics in Computer Science 3.3 (2010): Special Issue on Authoring, Digitalization and Management of Mathematical Knowledge*. Ed. by S. Autexier, P. Sojka, and M. Suzuki, pp. 299–307. URL: <http://kwarc.info/kohlhase/papers/mcs10.pdf>.

## 6 The iPoWr consortium as a whole

Describe how the participants collectively constitute a consortium capable of achieving the project objectives, and how they are suited and are committed to the tasks assigned to them. Show the complementarity between participants. Explain how the composition of the consortium is well-balanced in relation to the objectives of the project.

If appropriate describe the industrial/commercial involvement to ensure exploitation of the results. Show how the opportunity of involving SMEs has been addressed

The project partners of the iPoWr project have a long history of successful collaboration; Figure 6.0.1 gives an overview over joint projects (including proposals) and joint publications (only international, peer reviewed ones).

|       | JACU   | EFO | BAR | BAZ |
|-------|--|-----|-----|-----|
| JACU  |  | ○★  | ☺   | ○★  |
| EFO   | ○★   |     | ●   | ○★@ |
| BAR   | ☺  | ●   |     |     |
| BAZ   | ○★   | ○★@ |     |     |
| joint | ★ ≙ publication, ● ≙ project, ○ ≙ organization, @ ≙ software/resource dev, ☺ ≙ supervision |     |     |     |

Table 6.0.1: Previous Collaboration between iPoWr members

### 6.1 Subcontracting

If any part of the work is to be sub-contracted by the participant responsible for it, describe the work involved and explain why a sub-contract approach has been chosen for it.

### 6.2 Other Countries

If a one or more of the participants requesting EU funding is based outside of the EU Member states, Associated countries and the list of International Cooperation Partner Countries<sup>4</sup>, explain in terms of the project's objectives why such funding would be essential.

### 6.3 Additional Partners

If there are as-yet-unidentified participants in the project, the expected competences, the role of the potential participants and their integration into the running project should be described

## 7 Resources to be Committed

Maximum length: two pages

Describe how the totality of the necessary resources will be mobilized, including any resources that will complement the EC contribution. Show how the resources will be integrated in a coherent way, and show how the overall financial plan for the project is adequate.

In addition to the costs indicated on form A3 of the proposal, and the effort shown in Section 1.3 above, please identify any other major costs (e.g. equipment). Ensure that the figures stated in Part B are consistent with these.

### 7.1 Travel Costs and Consumables

### 7.2 Subcontracting Costs

### 7.3 Other Costs

<sup>18</sup>To Do: from the proposal template

<sup>19</sup>To Do: from the proposal template

<sup>20</sup>To Do: from the proposal template

<sup>4</sup>See CORDIS web-site, and annex 1 of the work programme.

<sup>21</sup>To Do: from the proposal template

<sup>22</sup>To Do: from the proposal template

Impact <sup>23</sup>

EdN:23

## 8 Expected Impacts listed in the Work Programme

*Describe how your project will contribute towards the expected impacts listed in the work programme in relation to the topic or topics in question. Mention the steps that will be needed to bring about these impacts. Explain why this contribution requires a European (rather than a national or local) approach. Indicate how account is taken of other national or international research activities. Mention any assumptions and external factors that may determine whether the impacts will be achieved.*

ToDo:24

Done:24

### 8.1 Medium Term Expected Outcome

### 8.2 Long Term Expected Outcomes

### 8.3 Use Cases

## 9 Dissemination and/or Use of Project Results, and Management of Intellectual Property

*Describe the measures you propose for the dissemination and/or exploitation of project results, and how these will increase the impact of the project. In designing these measures, you should take into account a variety of communication means and target groups as appropriate (e.g. policy-makers, interest groups, media and the public at large).*

ToDo:25

*For more information on communication guidance, see the URL [http://ec.europa.eu/research/science-society/science-communication/index\\_en.htm](http://ec.europa.eu/research/science-society/science-communication/index_en.htm)*

*Describe also your plans for the management of knowledge (intellectual property) acquired in the course of the project.*

Done:25

<sup>23</sup>EdNOTE: Maximum length for the whole of Section 3 — ten pages

<sup>24</sup>To Do: from the proposal template

<sup>25</sup>To Do: from the proposal template

**Ethical Issues** Describe any ethical issues that may arise in the project. In particular, you should explain the benefit and burden of the experiments and the effects it may have on the research subject. Identify the countries where research will be undertaken and which ethical committees and regulatory organisations will need to be approached during the life of the project.

Include the Ethical issues table below. If you indicate YES to any issue, please identify the pages in the proposal where this ethical issue is described. Answering 'YES' to some of these boxes does not automatically lead to an ethical review<sup>1</sup>. It enables the independent experts to decide if an ethical review is required. If you are sure that none of the issues apply to your proposal, simply tick the YES box in the last row.

|  | YES | PAGE |
|--|-----|------|
| <b>Informed Consent</b>  |     |      |
| Does the proposal involve children?  |     |      |
| Does the proposal involve patients or persons not able to give consent?  |     |      |
| Does the proposal involve adult healthy volunteers?  |     |      |
| Does the proposal involve Human Genetic Material?  |     |      |
| Does the proposal involve Human biological samples?  |     |      |
| Does the proposal involve Human data collection?   |     |      |
| <b>Research on Human embryo/foetus</b>   |     |      |
| Does the proposal involve Human Embryos?   |     |      |
| Does the proposal involve Human Foetal Tissue / Cells?   |     |      |
| Does the proposal involve Human Embryonic Stem Cells?  |     |      |
| <b>Privacy</b>   |     |      |
| Does the proposal involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction) |     |      |
| Does the proposal involve tracking the location or observation of people?  |     |      |
| <b>Research on Animals</b>   |     |      |
| Does the proposal involve research on animals?   |     |      |
| Are those animals transgenic small laboratory animals?   |     |      |
| Are those animals transgenic farm animals?   |     |      |
| Are those animals cloned farm animals?   |     |      |
| Are those animals non-human primates?  |     |      |
| <b>Research Involving Developing Countries</b>   |     |      |
| Use of local resources (genetic, animal, plant etc)  |     |      |
| Benefit to local community (capacity building i.e. access to healthcare, education etc)  |     |      |
| <b>Dual Use</b>  |     |      |
| Research having direct military application  |     |      |
| Research having the potential for terrorist abuse  |     |      |
| <b>ICT Implants</b>  |     |      |
| Does the proposal involve clinical trials of ICT implants?   |     |      |
| <b>I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL</b>  |     |      |

## 10 Personal Data

<sup>26</sup>To Do: from the proposal template

## References

- [Aus+10] R. Ausbrooks et al. *Mathematical Markup Language (MathML) Version 3.0*. W3C Recommendation. World Wide Web Consortium (W3C), 2010. URL: <http://www.w3.org/TR/MathML3>.
- [Knu84] D. E. Knuth. *The TeXbook*. Addison Wesley, 1984 (cit. on p. 9).
- [Knu92] D. E. Knuth. *Literate Programming*. The University of Chicago Press, 1992 (cit. on p. 9).
- [Koh+11] M. Kohlhase et al. “The Planetary System: Web 3.0 & Active Documents for STEM”. In: accepted for publication at ICCS 2011 (Finalist at the Executable Papers Challenge). 2011. URL: <https://svn.mathweb.org/repos/planetary/doc/epc11/paper.pdf>.
- [Koh06] M. Kohlhase. *OMDOC – An open markup format for mathematical documents [Version 1.2]*. LNAI 4180. Springer Verlag, Aug. 2006. URL: <http://omdoc.org/pubs/omdoc1.2.pdf>.
- [Koh10] M. Kohlhase. *Preparing DFG Proposals in L<sup>A</sup>T<sub>E</sub>X with dfgproposal.cls*. Self-documenting L<sup>A</sup>T<sub>E</sub>X package. KWARC Group, Jacobs University Bremen, 2010. URL: <https://svn.kwarc.info/repos/kwarc/doc/macros/forCTAN/dfgproposal.pdf>.
- [Lam94] L. Lamport. *LaTeX: A Document Preparation System, 2/e*. Addison Wesley, 1994 (cit. on p. 9).
- [Pro] ...
- [Sta+10] H. Stamerjohanns, M. Kohlhase, D. Ginev, C. David, and B. Miller. “Transforming large collections of scientific publications to XML”. In: *Mathematics in Computer Science 3.3 (2010): Special Issue on Authoring, Digitalization and Management of Mathematical Knowledge*. Ed. by S. Autexier, P. Sojka, and M. Suzuki, pp. 299–307. URL: <http://kwarc.info/kohlhase/papers/mcs10.pdf>.